

ABSTRACT OF THE DISCLOSURE

In an apparatus, a method, and a program for estimation of biological electromagnetic compatibility, model data of a scattering body and an electromagnetic wave radiation source, data for prescribing a range to which an MoM including the electromagnetic wave radiation source is applied and a range to which a scattered field type FDTD method including the scattering body and the range to which the MoM is applied, and the like are previously prepared. The distribution of a current distributed by a voltage fed to the electromagnetic wave radiation source is determined by the MoM, incident electromagnetic fields incident on the respective grids in the scattering body are determined using the resultant distribution of the current, an electromagnetic field scattered from the scattering body is determined from the resultant incident electromagnetic field by the scattered field type FDTD method, electromotive forces induced in the respective segments of the electromagnetic wave radiation source are determined from the resultant scattered electromagnetic field, and further the distribution of the current is determined again in consideration of the induced electromotive forces. The above processing steps are repeated until the electromagnetic fields incident on the respective grids in the scattering body, and the like are converged. With the above operation, the biological electromagnetic compatibility can be estimated by executing calculations simply without depending on the distance between

the electromagnetic wave radiation source and the scattering body.